

Partnership Project Success Story

State:	Wyoming	FS Funds Used:	\$ 2,000.00
National Forest/Grassland:	Bighorn	Other Funds Used:	\$ 13,870.00
		Partners:	\$ 5,545.00
Project Name:	Stream Water Quality	Total Project Cost:	\$ 21,415.00

Project Purpose/Objectives: To conduct baseline water quality monitoring for all streams originating within the Cloud Peak Wilderness. This project was initiated by our partners and endorsed by our Hydrology and fisheries staff. Water quality information for baseline data was non-existent for these streams prior to the Cloud Peak Chapter of Wilderness Watch initiating the effort in 1998. Data collected includes water chemistry, flows and macro invertebrate samples.

This information will be useful in future years for comparison with samples collected then to determine impacts from management actions both within the boundaries of the Cloud Peak Wilderness and lands outside of the designated wilderness.

Grants from Wal-Mart (\$9,900) and National Forest Foundation (\$3,970) were obtained by the Volunteers to provide the other funds used.

Work Performed: The partnership work performed included scouting for appropriate sampling locations, planning sampling trips into the backcountry, quality control/quality assurance of samples collected using the Wyoming Department of Environmental Quality protocols and write-ups of the results of the sampling results.

Scouting trips were needed to locate proper collection locations near the boundary of the Cloud Peak Wilderness. The sites needed to have the appropriate size rocks in the stream so macro invertebrate sampling could be conducted and surface water flow for collection of necessary water samples. These locations could be a day's hike cross-country to reach before sampling could be started. Many of the trips required overnight stays. Macro invertebrate samples were gathered from the substrate and placed into collection jars. These samples were mailed out of state for identification.

Quality Control/Quality Assurance included review of all samplings; reviews by a consultant of data collected and double-checking calculations. An interim report on data from the first eleven streams was done at the completion of the 2004 sampling field season. The project is expected to be completed in 2007 and final results published by the chapter in 2008.

Benefits: Both the State of Wyoming Department of Environmental Quality and the Bighorn National Forest hydrology and fisheries staffs have expressed interest in this project. The information is baseline data never collected previously and will be invaluable in the coming years. The state DEQ staff hopes it will ensure that the state meets the beneficial uses goals set up for the state's waters and the Bighorn National Forest staffs intend to use it for monitoring. With this baseline data and previously collected data from downstream sites it will be possible to estimate impacts to water quality parameters from various management activities on the Bighorn National Forest.

Additional Information

Partners: Wal-Mart and National Forest Foundation



Wilderness Watch Volunteers conducting stream quality sampling.



Wilderness Watch volunteer working on sampling site. Note tape measure to left of volunteer.



Another day of stream quality sampling in the Cloud Peak Wilderness. Sampling at each location takes about 4 hours to complete the field work.